L&T Hydraulics manufactures and supports a wide range of high pressure hydraulic products, hydrostatic transmissions and customized hydraulic systems at its stateof-the-art facility in Bengaluru, India











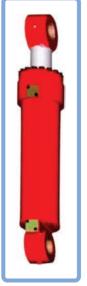






Cylinders

L&T Hydraulics designs and manufactures a wide range of Hydraulic Cylinders

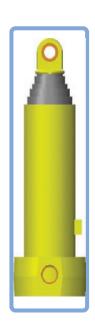


High Pressure Cylinder

Specifications

Bore diameter	Up to 350 mm
Stroke	Up to 4000 mm
Pressure	Up to 450 bar (High Pressure Cylinder)
	Up to 350 bar (Medium Pressure Cylinder)
	Up to 50 bar (Low Pressure Cylinder)

End mountings Eye end, Trunnion, Flange, foot or any other type, depending on requirement



Telescopic Cylinder



Two stage Telescopic Cylinder - 12.5 meters OCL(Open center length) & 5 meter CCL(Closed center length); Both ends with internal cushioning



Medium & Low Pressure Cylinder



Industrial Cylinder



Our Hydraulic cylinders are used in Excavators, Wheel loaders, Dump trucks and various other industrial & construction applications.













Turning Joint / Swivel Joint

L&T Hydraulics designs & manufactures Turning Joints / Swivel Joints to suit customer requirements.

Turning joints are used to continuously transfer fluid between two rotating sub-assemblies of an equipment.

Specifications

No. of ports 5 to 16

Pressure Up to 350 bar

Flow handled Up to 700 lpm

Medium Hydraulic Oil

Requirements beyond the above range are available on request.

Typical applications are in Hydraulic excavators and Mobile cranes.









High Torque Low Speed Motors





G3 Bearing Motor

G3 Torque Motor

L&T Hydraulics manufactures HTLS motors which deliver a very high torque at low speeds. They can operate up to a maximum pressure of 450 bar.

The motors are available in Shaft, Wheel, Compact & Torque versions.





G3 Compact Motor

G3 Wheel Motor

Specifications

				Max. Speed (rpm)	
Туре	Displacement cc/vvh	Torque @ 100 bar Nm	Max. Power KW	Full Displacement	Half Displacement
G3 - H15	1130	1797	52	146	220*
G3 - H20	1979	3147	76	120	180*
G3 - H25	3122	4964	100	100	150*
G3 - H30	4914	7813	135	85	120*

^{*} Available only for Compact, Torque & Wheel Motors

Other options include: Static parking brake, Dual displacement, Splined & Key shafts and Freewheeling.

Typical applications are in Excavators, Blast hole drill rigs, Compactors, Hydraulic Winches, Mining and Material handling equipments.











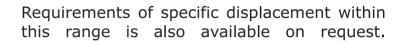
Radial Piston Pumps



L&T Hydraulics manufactures a wide range of radial piston multi-flow pumps capable of developing a maximum operating pressure of 350 bars

Specifications

No. of flows available	1,2,3,4 & 6
Direction of rotation	(cw/ccw)
Displacement (cc/rev.)	5,10,20,25,28.5 40,58,65,74 & 85



Typical applications are in Hydraulic excavators, Drill rigs, Material handling systems and Hydraulic Presses.











Customised Hydraulic Systems



Hydraulic System for Mould Tilting Table



Power Pack



Side Arm Charger



Power Pack for Side Arm Charger Travel Drive



Wagon Tippler



Power Pack for Wagon Clamp & Tippler Drive



Paddle Feeder



Power Pack and Drive



Railway Crane



Hydraulic Winch, Slew and Travel drives for Crane





Variable Work Table- Wheel Dolly



Specifications

Overall Dimension:	1950Wx3900Lx1125H mm
Table size:	1750Wx2350Lx40H mm
Max working load:	12000 Kgs
Electric motor power:	7.5 KW
Tare weight:	3.6 Tons
Ground clearance:	100 mm
Lift	Max 150 mm
Tilt (Front/Back)	8.1° from Horizontal Plane
Tilt (Left/Right)	6.9 [°] from Horizontal Plane

- Designed for safe and precise positioning of components viz wheel motors armatures etc, during assembly/disassembly
- Environment friendly Powered by electric motor
- Easy to operate Conveniently positioned & user friendly controls
- Additional control valve for powering auxiliary tools/attachments
- Smooth operations Hydraulic System for all functions viz:

 Lift & Tilt
 Slew & Slide Shift
 Propulsion & Steering
- Safety features :

Cylinders designed for high pressure with load holding valves Propel motors with inbuilt failsafe parking brake Self winding trailing cable drum Sturdy table with 40mm thick plate for jig mounting

Operation









Milestones

1975	L&T Bengaluru Works established in collaboration
	with Poclain SA, France for excavator manufacture

- 1982 Hydraulics Works established to manufacture Hydraulic Motors & Hydraulic Pumps
- 1995 Business Process Re-engineering launched
- 1996 Hydraulics Works Certified under ISO 9001
- 1997 Golden Peacock & Rajiv Gandhi National Award
- 1998 Joint venture with Komatsu Asia Pacific L&T Komatsu Ltd. (LTK)
- 2000 CII-EXIM Business Excellence Commendation for Commitment to Total Quality



2007 Certified for Integrated Management System of ISO 14001:2004

2007 Launch of SCRIPT 6500-Strategic Supply chain initiative

2010 CII BE - Awarded - SIGNIFICANT ACHIEVEMENT

2011 Hydraulics Works re-certified for ISO 9001-2008

2011 Awarded the Platinum award for Quality systems by FICCI

2013 LTK becomes L&T Construction Equipment Ltd., a 100% subsidiary of L&T

Overview

- More than 30 years of manufacturing experience in High Pressure / High Precision.
- Hydraulic Products for Construction, Earthmoving & Customized Hydraulic Equipment for material handling.

Technology Absorption

- Poclain Hydraulics, France Radial Piston Motors, Pumps, Cylinders & Turning Joints
- Sauer Sundstrand Axial Motors & Pumps
- Komatsu Cylinders, Drives & Swivel Joints.
- Highly skilled (Qualified from Technical schools) & experienced workforce.
- Excellent track record of export including components & parts to Poclain Hydraulics, France & Komatsu, Japan.
- Ability to engineer hydraulic systems for customer specific applications including design, fabrication, installation and commissioning.



Key Manufacturing Facilities



Rod Induction Hardening



Rod Welding



Rod Ultrasonic Testing



Skiving & Roller Burnishing



Automated Tube Welding



Tube Ultrasonic Testing



Cylinder Assembly



Automated Cylinder Testing



Automated Painting System (Seamless Integration with Assembly & Testing)



Overview of Machine Shop



Phosphating & Kolene Plant



Hydraulics Motor Cam Profile machined on CNC m/c



Form tester for Roundness Cylindricity, Straightness of super finished parts



Surface Table 00 Grade for calibration



Carl Zeiss Co-ordinate Measuring m/c

L&T Construction Equipment Limited

Marketing - Hydraulic Products Bellary Road, Byatarayanapura, Bengaluru - 560 092

Tel: +91 80 2216 5100 Fax: +91 80 2363 6065

E-mail: ajit.k@larsentoubro.com

L&T Construction Equipment Limited

Marketing - Hydraulic Products Tc1 Building, 2nd Floor, ECC Campus, Mount Poonamallee Road, Manapakkam, Chennai - 600 089

Tel: +91 44 2270 6865

E-mail: sanjaybk@larsentoubro.com

L&T Construction Equipment Limited

Marketing - Hydraulic Products 3B, Shakespeare Sarani, Kolkata - 700 071

Tel: +91 33 2282 7522

Fax: +91 33 2282 7587 / 2282 1025 E-mail avik.halder@larsentoubro.com

L&T Construction Equipment Limited is a wholly owned subsidiary of Larsen & Toubro Limited

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